

Henry Chen

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EDUCATION

University of Toronto

Graduated April 2026

HBSc. Computer Science (Specialist focus in Computer Systems, Mathematics Minor)

- **CGPA:** 3.79/4.0
- **Relevant Courses:** Operating Systems, Neural Networks & Deep Learning, Computer Networking
- **Awards:** The Robert Bruce Scholarship, Mark Gayn Award

TECHNICAL SKILLS

C | Linux/UNIX | Firesim | Java | Python | Machine Learning | TypeScript & React | Tailwind | Node & Next.js | Assembly (RISC-V/X86) | MySQL | Data Structures & Algorithms | Restful APIs | Git | Docker

EXPERIENCE

UNDERGRADUATE RESEARCHER | University of Toronto - SITH Lab | May 2025 - Present | Toronto

- Developed toolkit to fuzz RISC-V CPUs to automatically detect microarchitectural side channel leaks, under the supervision of Prof. Gururaj Saileshwar.
- Awarded Department of Computer Science Research Award.

WEBSITE DEVELOPER & MANAGER | Consulting Industry | March 2022 - Present | Ottawa

- Spearheaded the development of new websites to expand the portfolio of services.
- Transformed Wordpress sites into Next.js RESTful applications and integrated AI workflows.

PROJECTS

UT369 - USER-LEVEL THREAD PACKAGE | C, LINUX/UNIX, OPERATING SYSTEMS

- Developed custom library code to manipulate thread context registers for **context switching**.
- Implemented library functions to create and maintain **thread control blocks**.
- Leveraged **Valgrind** and **GDB** for debugging purposes.

SCRIPTORIUM - WEBSITE | JAVASCRIPT, TYPESCRIPT, NEXT.JS, REACT, PRISMA ORM, DOCKER, TAILWIND

- Developed user authentication and authorization system using JWT **token authentication**.
- Utilised **Docker** containers to create isolated code sandboxes for users.
- Leveraged React and TailwindCSS to deliver a **single-page & responsive UI**.

UNIVERSITYEXPLORER - RECOMMENDATION SOFTWARE | Java, MySQL, Python

- Developed software in a **team** environment following **Clean Architecture** and **SOLID principles**.
- Created a Python **Flask** based web **API** to handle HTTP requests to access a mySQL database.
- Coded **test suites** and demonstrated the Maven project to stakeholders.

VOLUNTEERING

CYBERSENIORS - TECHNOLOGY ASSISTANT

- Assisted local seniors with adopting and using technology.
- Provided technical support by diagnosing and resolving hardware or software issues.

Achievements

- Governor General's Academic Medal (Bronze)
- Dean's List Scholar, Ontario Scholar
- DELF B2